

ABSTRACT

A furnace for heat treating of metal parts is disclosed. The heat treating furnace includes a hot zone enclosure defining a hot zone therein. The hot zone enclosure has a side wall, a first end wall, and a second end wall. The side wall has slots formed therethrough and along the length thereof. The heat treating furnace also includes means for injecting a cooling gas into the hot zone through the hot zone enclosure. The heat treating furnace further includes a novel damper arrangement for directing the cooling gas over a selected portion or portions of the workpiece load and through one or more of the slots. In one embodiment of the invention, all actuated components in the furnace are located outside of the hot zone to minimize damage to moving parts that are caused by exposure to extreme heat.